

### REMARKS

Claims 2, 6, 8, 12, 15, and 20-25 are pending in this application. Claims 1, 9-11, 13, 14, and 16-19 are canceled herein. Claims 2, 6, 8, 12, 15, 20, and 21 have been amended herein. Claims 22-25 have been added. In view of these amendments and remarks, Applicant respectfully requests reconsideration of the claims.

Claim 15 was objected to for a typographical error and has been corrected.

Claim 1 was rejected under 35 U.S.C. 112, first paragraph on the basis that the specification implied that the improvements resulting from practicing the invention may be limited to only certain types of resists and that the specific resists that can benefit were not disclosed even though specific ARC's and solvents were specified. However, the inference drawn by the Examiner is incorrect in that although the improvements resulting from the practice of the invention may vary somewhat with the type of resist used, it is believed that all types of resists will benefit. It is not intended that the invention should be used with only certain types of resists.

More specifically, it is noted that the phrase "some types of [photo] resists" cited by the Examiner is found only in a portion of the Background of the application that briefly discusses the prior art and was not found in the "Detailed Description" which defines the invention. Further the sentence that includes the cited phrase continues with the explanation that "excessive" roughness can be observed. Thus, this sentence within the Background of [the] Invention was not cited to limit the use of the invention to specific types of resists, but simply to indicate that the amount of roughness may be greater with some resists.. It is noted that paragraph 10 of the application clearly states "various types of photoresist...can be used."

Although it is believed the above discussion should clearly be sufficient to remove the rejection under 35 U.S.C. 112, if the Examiner prefers the applicant can further clarify the sentence "In some types of photoresist, excessive roughness can be observed ...or LER)." to read -- Excessive roughness can *often* be observed...or LER).

In paragraph 4 of the Office Action, the Examiner further rejects claim 1 under 35 U.S.C. 112 on the basis that "The specification compares a conventional process containing no anti-reflection coating (ARC) with a current inventive process that contains an ARC," and that since the use of ARC is well known for reducing standing waves in the resist layer and thereby reduces LER, that there is no evidence that correlates the reduction in LER to the drying process as opposed to the use of the ARC.

However applicant's attorney respectfully disagrees that the specification compares a conventional process that does not use ARC with the inventive process that does use ARC. More specifically, paragraph 10 describes an embodiment without ARC. Paragraph 11 then describes a second embodiment that includes ARC. Paragraph 11 clearly makes the use of ARC optional, as the paragraph states "...an antireflective coating (ARC) *can be* deposited...". The term *can be* clearly means the use of an ARC is optional. To further clarify that this sentence is referring to a second embodiment, the phrase "Therefore according to another embodiment" has been added.

Claim 1 was also rejected under 35 U.S.C. 102(b) and/or 35 U.S.C. 103(a) as being anticipated or made obvious by the Japanese Patent (JP 64-015926) to Ofuji. However, independent claim 1 has been cancelled and all claims depending there from have been amended to depend from amended claim 20. Further, independent claims 20 and claim 21 have been amended to now include a combination of steps not disclosed in or made obvious by the references of record whether considered singly or in combination. More specifically, each of the

independent claims (20 and 21) now require drying in a vacuum and within a specific temperature range to reduce LER (line edge roughness).

Paragraph 10 of the Office Action concludes that resist types were not disclosed and that no correlation was established between solvent evaporation at low temperature and reduced LER, and that diverse factors contribute to LER as shown by various U.S. patents.

As was discussed above, the invention is applicable to all types of resist and is not limited to any specific type. Also, whether other factors contribute to LER, as stated by the Examiner, is true or not does not change the fact that the present invention provides and teaches a method that helps decrease LER, nor does the application imply that LER can not be reduced by controlling other process factors.

Therefore, it is submitted that the claims now in the case do patentable define over all reference of record and the application is in condition for allowance.

In view of the above, Applicant respectfully submits that the application is in condition for allowance and requests that the Examiner pass the case to issuance. If the Examiner should have any questions, Applicant requests that the Examiner contact Applicant's attorney at 972-732-1001 so that such issues may be resolved as expeditiously as possible. No fee is believed due in connection with this filing. However, should one be deemed due, the Commissioner is hereby authorized to charge the appropriate fees to Deposit Account No. 50-1065.

Respectfully submitted,

7 July 2004  
Date

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